Appendix

Clean copy of claims as amended

36 A mat comprising a plurality of discontinuous reinforcement fibers, wherein the reinforcement fibers have at least a 9 to 1 machine to cross direction mat strength ratio,

and wherein a basis weight of said mat falls within the range of 68 to 339 gm/square meters, and wherein the reinforcement fibers are selected from the group consisting of polyacrylonitrile or pitch based carbon; glass; para-amid; ceramics; metals; high temperature thermoplastics; thermosets; liquid crystal polymer fibers; ultra high molecular weight polyethylene and natural or synthetic spider web.

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37. A mat comprising a plurality of discontinuous reinforcement fibers having at least a 90% machine direction orientation, and wherein a basis weight of said mat falls within the range of 68 to 339 gm/square meters, and wherein the reinforcement fibers are selected from the group consisting of polyacrylonitrile or pitch based carbon; glass; para-amid; ceramics; metals; high-temperature thermoplastics; thermosets; liquid crystal polymer fibers; ultra high molecular weight polyethylene and natural or synthetic spider web.

40. A product comprising a plurality of mats, each of said mats comprising a plurality of discontinuous reinforcement fibers having at least a 90% machine direction orientation,

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and wherein a basis weight of each of said mats falls within the range of 68 to 339 gm/square meters, and wherein the reinforcement fibers are selected from the group consisting of polyacrylonitrile or pitch based carbon; glass; para-amid; ceramics; metals, high-temperature thermoplastics; thermosets; liquid crystal polymer fibers; ultra high molecular weight polyethylene and natural or synthetic spider web.

43. A mat according to claim 36, wherein the reinforcement fibers are glass.

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- 44. A mat according to claim 36, wherein the reinforcement fibers are polyacrylonitrile (PAN) carbon.
- 45. A mat according to claim 36, wherein the reinforcement fibers are pitch carbon.